

## INTERNATIONAL SEARCH REPORT

 International Application No  
 PCT/EP 03/09686

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B21J15/02 B21J15/04 F16B19/08 F16B29/00

According to International Patent Classification (IPC) or to both national classification and IPC.

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B21J F16B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,A	DE 101 60 771 A (NEWFREY LLC NEWARK) 26 June 2003 (2003-06-26) cited in the application the whole document ---	1,2,6
A	DE 37 44 450 A (BOELLHOFF & CO) 13 July 1989 (1989-07-13) column 1, line 26-42; figure 1 column 2, line 10-12; figure 2 ---	1,2,6
A	FR 1 300 424 A (J & S ENGINEERS LTD) 3 August 1962 (1962-08-03) page 1, column 2, line 24 -page 2, column 1, line 20 page 3, column 2, line 9-22; figures 1-6,10 --- -/--	1,2,6

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
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- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*G\* document member of the same patent family

Date of the actual completion of the international search

27 November 2003

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05/12/2003

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 196 52 031 A (BOSCH SIEMENS HAUSGERAETE) 18 June 1998 (1998-06-18) column 3, line 11-23; figure 1 -----	1,2
A	US 2002/119025 A1 (WIRTH KLAUS ET AL) 29 August 2002 (2002-08-29) figures 5-10 -----	
A	EP 0 351 715 A (HILTI AG) 24 January 1990 (1990-01-24) figures 1-5 -----	